Application No. Not Yet Assigned Paper Dated: August 22, 2006 In Reply to USPTO Correspondence of N/A

Attorney Docket No. 3135-062458

## **AMENDMENTS TO THE SPECIFICATION**

Please insert the following section headings on amended page 1, after the title and at line 2:

## -- BACKGROUND OF THE INVENTION

1) Field of the Invention --

Please insert the following section heading on amended page 1, at line 8:

-- 2) Description of the Related Art --

Please insert the following section heading on amended page 2, at line 11:

-- SUMMARY OF THE INVENTION --

Please replace the paragraph on amended page 2, beginning at line 12, with the following replacement paragraph:

-- The invention has for its object to provide an improved device of the type stated in the preamble for heating liquids, with which a liquid can be heated in relatively efficient and rapid manner.

Please replace the paragraph on amended page 2, beginning at line 15, with the following replacement paragraph:

-- The invention provides for this purpose a device of the type-stated in the preamble, characterized in that comprising a base structure and at least one heating element connected to the base structure, wherein at least one non-linear channel structure is arranged between the base structure and the heating element for throughflow of a liquid for heating, wherein the device comprises bias-generating means to enable the base structure to connect under bias to the heating element. Application of the bias-generating means will press the base structure under bias against the heating element, whereby the formation of gaps between the heating element and the base structure can thus be prevented, as a result of which permanent connection of the strip to the heating element is enabled and de facto compensation for deformation of the heating element is allowed. The bias can herein be realized by bias-generating means, such as for instance a diaphragm spring. A diaphragm spring is particularly advantageous here in enabling a homogeneously distributed bias to be realized. The channel structure is in fact bounded and formed here by both the base structure and the heating element. Heat can thus be transferred

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directly - without interposing another element - and therefore relatively efficiently from the heating element to the liquid for heating. Particularly in the case where liquid is driven through the channel structure at relatively high speed, a relatively efficient and rapid heat transfer per unit of volume of liquid can be achieved per unit of time. An additional advantage here is that precipitate, such as for instance limescale, cannot be deposited in the channel structure, or at least hardly so, as a result of the relatively high flow speed, which results in a relatively lowmaintenance device. Because the channel structure does not take a linear form, the contact surface between the heating element and the liquid for heating situated in the channel structure can be maximized, which, in addition to a relatively rapid heating of the liquid to ana desired temperature, also results in a relatively compact device for rapid and efficient heating of liquids. Furthermore, application of the device according to the invention functioning in energetically advantageous manner generally results in a cost saving. By applying the channel structure arranged between the base structure and the heating element, the surface area to volume ratio of the channel structure can moreover be maximized in relatively simple manner by for instance giving the channel or the channels of the channel structure a relatively flow (shallow) form, whereby the channel structure only acquires a limited volume, which can considerably improve the temperature increase of the liquid for heating per unit of time. The throughput time of the liquid through the device can be reduced considerably by the significantly improved heating of the liquid per unit of time, whereby the user can dispose of the heated liquid relatively quickly. The liquid can herein be guided through the channel structure at a flow rate of up to several metres per second, preferably between 1 and 3 metres per second. Such a relatively high flow rate is particularly advantageous in that vapour bubbles which may form in the channel structure are generally flushed immediately out of the device. Such a relatively high flow rate furthermore prevents deposition of contaminants, such as lime and the like, on the heating element and/or the base structure. The deposition of contaminants on the heating element is particularly adverse for the heat transfer from the heating element to the liquid for heating. It is noted that the non-linear channel structure is provided with one or more, optionally mutually parallel, non-linear channels, wherein the liquid for heating runs through a non-linear two-dimensional or three-dimensional Application No. Not Yet Assigned Paper Dated: August 22, 2006 In Reply to USPTO Correspondence of N/A Attorney Docket No. 3135-062458

route. It is however very well possible here to envisage parts of channel structure nevertheless taking a linear form, but wherein the liquid runs through the device via a labyrinthine route.

Please insert the following section heading on amended page 8 at line 15:

-- BRIEF DESCRIPTION OF THE DRAWINGS --

Please insert the following section heading on amended page 9 at line 13:

-- DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS --